slender form of the egg-laying females. The general type of antenna is the same in both species and they also have the bright red eyes.

EXPLANATION OF PLATE XI.

Asiphum pseudobyrsa: Figure *B*, Alate migrant of the second generation; *A*, antenna of the preceding enlarged 100 times. From Journal of Economic Entomology, Jan., 1908. Drawings by Miss Miriam A. Palmer. From ENTOMOLOGICAL NEWS, Vol. XIX, Plate I.

Figure *C*: Leaf of *Populus coccinea* showing the stem mother gall of *Asiphum pseudobyrsa* Walsh on the midrib; *D*, the underside of the same leaf showing the colony of young in all stages of development located along the main veins. About two-thirds natural size. Original.

Figure *E*: Stem mother of *Asiphum pseudobyrsa* Walsh, body somewhat shrunken in length; enlarged about 15 diameters. Drawing by Miss Caroline M. Preston.

Some Nomenclatorial Notes on the Dipterous Family Trypetidae.

By E. T. CRESSON, JR.

There has recently appeared in the Memoirs of the Indian Museum, Vol. III, No. 3, a paper by Prof. M. Bezzi, entitled "Indian Trypaneids (Fruit flies) in the Collection of the Indian Museum." This paper not only treats of the Indian species but gives an entirely new classification of the genera of this family. There has long been a want of such a reorganization based more upon structural characters than heretofore, and Prof. Bezzi, who has given much study to the fruit flies of the world, has certainly furnished an excellent foundation for the establishment of the genera of this family.

The family is divided into two subfamilies namely, Dacinae and Trypaneinae. The latter is further divided into three tribes, Ceratitininae, Myioptininae and Trypaneininae. The subfamily Dacinae is not represented within the nearctic zone. It probably includes the remarkable *Toxotrypana* Gers. of Mexico. The tribe Ceratitininae is characterized by having the cilia of the posterior orbits composed of fine black bristles

or setulae which are rarely white; mesonotum usually with black pubescence; third vein usually setulose, at least as far as anterior cross vein. It includes the nearctic genera *Acidia, Strauzia, Trypeta=(Spilographa), Zonosema, Rhagoletis, Oedaspis, Peronyma, Epochra* and *Aciura.*

The tribe Myioptininae is not represented in this zone. The tribe Trypaneininae is characterized by having the cilia of the posterior orbits composed of thickened, whitish, blunted bristles or setulae; mesonotum with whitish pubescence; third vein bare; proboscis usually long and geniculated. It includes the nearctic genera *Stenopa, Terellia, Tomoplagia=(Plagiotoma), Neaspilota, Eutreta, Paracantha, Ensina, Euaresta, Tephritis* and *Trupanea.*

This classification is certainly an improvement over the one now used, proposed by Loew, and divides the family into groups which are probably more natural. It was characteristic of Loew to disregard the chaetotaxy, so he had to fall back on the wing pattern in most cases. In the study of this paper of Prof. Bezzi's and of a few others, augmented by a small collection, a few interesting problems have come up, dealing mainly with nomenclature, which have given rise to the following notes:

Trypeta Meig. (*Spilographa* Lw.).

Trypeta was first proposed by Meigen in 1803[1] for the species *Musca arnica, M. cerasi, M. urticae, M. artemisiae.* All are credited to Fabricius. Curiously enough, none of these species was included in the genus by Loew in his Bohrfliegen, 1862, or has been since. The type species was first designated by Coquillett in 1910[2] as *Musca artemisiae* Fab. (1794). This species was one of those originally included under *Spilographa* Lw. (1862) so this designation makes the latter genus a synonym of *Trypeta.* This unfortunately causes some confusion in the conception of the two, but there is no other solution unless the other species originally included under *Spilographa* are not congeneric. The species heretofore known as typical Trypetae will

(1) Illiger Magazin für Insekt. ii, 277.

(2) Proc. U. S. Nat. Mus., xxxvii, 618.

now go under *Terellia* Desv. (1830), with *Musca serratulae* Linn. (1758)=(*Terellia palpata and T. luteola* Desv.) as the type species, designated by Coquillett (1910).

Mr. Coquillett in his Type Species of North American Genera, makes *Oedaspis* Lw. (1862) a synonym of *Orellia* Desv. (1830). For the former he designates *Trypeta multifasciata* Lw. (1850); for the latter *Trypeta wiedemanni* Meig. (1826) (as *Orellia flavicans* new species). The two species are evidently not congeneric, so *Oedaspis* may stand for our species as given in Aldrich's catalogue.

Paracantha Coq. (1899).

This was proposed for *Trypeta culta* Lw. Wied. (1830) as distinct from *Carphotricha* Lw. (1862). There were three species originally included under *Carphotricha,* two of which were designated type species of two genera by Rondani in 1856, *Trypeta guttularis* Meig. (1826) type of *Dithryca* Rond. and *Trupanea reticulata* Schrank (1803) [as *Tephritis pupillata* Fall (1814)] type of *Oplocheta* Rond. This leaves only *C. strigilata* Lw. (1862) for its type species. Should this species be congeneric with one of the other two, then *Carphotricha* will have to fall. As regards *Paracantha,* there is a probability of its being a synonym of *Oplocheta* Rond., but my study of *Trupanea reticulata* is limited to one more or less imperfect specimen. As I am not aware that the type species of *Carphotricha* Lw. has ever been fixed, I herewith designate *Carphotricha strigilata* Loew as such.

Tephritis Latreille.

This genus was first proposed by Latreille in the "Nouveau Dictionnaire d'Histoire Naturelle, Tome XXIV, Tableaux Methodiques," dated "AN XII—1804," page 196, No. 585. The species mentioned under this reference are: *Musca arnica* and *Musca cerasi* Fab. These two species are credited to Linn. by Fabricius in his Entomologica Systematica, iv, pp. 352 and 358. Therefore one of these species is the only one available as the type species of this genus. Coquillett in 1910 quotes the genus as dating from the "Histoire Naturelle des Crustaces et Insectes

Tome XIV, AN XIII," which is equivalent to 1805. The species included under that reference is *Musca solstitialis* Fab. (1781) which seems to be a homonym of the present *Urophora solstitialis* Linn. (1758) and a synonym of the present *Urophora aprica* Fall. (1820). It will be seen that Coquillett's designation makes *Urophora* Desv. (1830) a synonym of *Tephritis* Latr. (1805), thus confusing the present idea of the genus *Tephritis*. This however is happily averted as will be seen below.

Prof. Bezzi in his Indian Trypetidae (1913) cites *Musca leontodontis* Deg. (1776) as the type species of *Tephritis* Latr. (1805) or, as he quotes the reference, "Hist.d.Crust.et Ins., xiv, 389, (1804)." This species was not included under the original description of *Tephritis* Latr., either in 1804 or 1805, and so cannot be the type species of that genus. He evidently is trying to retain the name for the genus as it is now or has been recognized, but his method is impossible. It is strange how the above mentioned "Dictionnaire d'Histoire Naturelle" has been repeatedly overlooked or ignored by most students. It however furnishes an agreeable solution to the present confusion surrounding this genus in the fact that *Musca arnica* Linn. (1758) is a typical *Tephritis* as the genus is now known and is one of the species originally included under the first reference to this name, and I herewith designate that species (*Musca arnica* Linn.) as the type species of *Tephritis* Latr. (1804).

Tephritis platyptera Lw. (1862) is not a typical *Tephritis* on account of its broad wings and radiating arrangement of the marginal spots; furthermore the foremost dorsocentral bristle is removed back from the sutural region to nearly opposite the supra-alar bristles. It seems to belong to *Campiglossa* Rond., but a study of *Tephritis irrorata* Fall. is necessary to make this certain.

Trupanea Schrank.

This name was evidently first used in 1795 in the "Briefe Donaumoor." I have not been fortunate enough to have seen this publication and so must take the record at second-hand. The original wording is Trupanea, but Prof. Bezzi uses an

emended form *Trypanea,* which I do not think necessary. This name unfortunately must take the place of *Urellia* Desv. (1830). This being the oldest genus in the family has influenced Prof. Bezzi to change the family name to agree. Of course he recognizes Meigen's 1800 genera in which case he is within his rights. I do not recognize the 1800 names and so prefer to retain *Trypeta* Meig. instead of *Euribia* Meig. The name of a family is the one first applied to it provided the genus from which it is named is included. The retention of *Trypeta* will necessitate the changing of Bezzi's tribe Ceratitininae to Trypetininae while his subfamily will be Trupaneinae with Trupaneininae as its typical tribe.

Some Facts About the Egg Nest of Paratenodera sinensis (Orth.).

By Harry B. Weiss, New Brunswick, New Jersey.

The egg nest of this striking and beneficial insect is peculiar in that it consists of a central, somewhat horny, core, containing the eggs, surrounded by a porous rind, which undoubtedly serves to protect the eggs from moisture and sudden changes in temperature.

Thermometric tests of the conductivity of this rind were made with quite a few nests, and the following tables, showing the temperature changes of three nests, indicate what happened generally. In each case a hole was drilled in the nest and the bulb of a thermometer inserted so that it occupied the same position as the core. The nests were then placed in an oven, the temperature of which was 160 deg. F. The nest temperature at the start was 64 deg. F., and a thermometer having no nest attached and reading 64 deg. F. at the start registered the oven temperature 160 deg. F. in two minutes.

Egg Nest A.

Temperature at start	64 deg. F.
Temperature at end of 5 minutes	102 deg. F.
Temperature at end of 10 minutes	148 deg. F.
Temperature at end of 12 minutes	160 deg. F.

Rise in 12 min., 96 deg. F.